

SEQUENCE LISTING

<110> Ausubel, Frederick M.
 Staskawicz, Brian J.
 Brent, Andrew F.
 Dahlbeck, Douglas
 Katagiri, Fumiaki
 Kunkel, Barbara N.
 Mindrinos, Michael N.
 Yu, Guo-Liang

<120> RPS2 GENE FAMILY, PRIMERS, PROBES, AND
 DETECTION METHODS

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<150> US 09/867,852
<151> 2001-05-29

<150> US 09/301,085
<151> 1999-04-28

<150> US 08/310,912
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<150> US 08/227,360
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 Glu Phe Gly Glu Cys Thr Ile Gln Gln Ala Val Gly Ala Arg Leu Gly
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 Tyr Arg Ala Leu Arg Gln Lys Arg Phe Leu Leu Leu Asp Asp Val
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 Tyr Lys Glu Leu Ile Leu Val Glu Pro Ser Met Gly His Thr Glu Ala
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<211> 13
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<213> Arabidopsis thaliana

<400> 68
Ser Tyr Gln Asn Arg Trp Arg Val Asn Ser Ser Asn Leu
1 5 10

<210> 69
<211> 22
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<213> Arabidopsis thaliana

<400> 69
Arg Asp Thr His Gln Val Arg Cys Arg Lys Tyr His Asp Asp Gly Thr
1 5 10 15
Gly Phe Gly Ile Ser Gln
20

<210> 70
<211> 24
<212> PRT

<213> Arabidopsis thaliana

<400> 70

Arg Arg Arg Lys Arg Asn His Trp Cys Leu Trp Thr Trp Trp Gly Trp
1 5 10 15
Glu Asp Asn Val Asn Ala Glu His
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<210> 71

<211> 10

<212> PRT

<213> Arabidopsis thaliana

<400> 71

Gln Arg Ala Asp His Lys Arg Thr Ser Val
1 5 10

<210> 72

<211> 55

<212> PRT

<213> Arabidopsis thaliana

<400> 72

Cys Thr Asp Leu Gly Ser Asn Val Gln Arg Ile Arg Arg Val Tyr Asn
1 5 10 15
Ser Ala Ser Arg Trp Ser Thr Val Gly Phe Ile Leu Gly Arg Glu Gly
20 25 30
Asp Arg Arg Lys Gln Ser Phe Glu Asp Ile Gln Ser Phe Glu Thr Glu
35 40 45
Thr Phe Leu Val Val Ala Arg
50 55

<210> 73

<211> 15

<212> PRT

<213> Arabidopsis thaliana

<400> 73

Cys Leu Gly Arg Asp Arg Leu Gly Glu Asn Trp Ser Ser Ser Thr
1 5 10 15

<210> 74

<211> 9

<212> PRT

<213> Arabidopsis thaliana

<400> 74

Arg Asp Arg Arg Arg Val Asp Pro Cys
1 5

<210> 75

<211> 41

<212> PRT

<213> Arabidopsis thaliana

<400> 75

Gln Gly Lys Gln Met Gln Gly Asp Val His Asp Thr Val Tyr Ser Ile
1 5 10 15
Met Gln Gln Tyr Gly Cys Gly Ile Gln Val Glu Ser Gly Val Ser Gly
20 25 30
Glu Glu Thr Arg Val Gly Ala Val Leu
35 40

<210> 76

<211> 21

<212> PRT

<213> Arabidopsis thaliana

<400> 76

Gly Met Glu Lys Arg Ser Phe Arg Val Ile Ile Asn Ser Pro Ala Arg
1 5 10 15
Gly Asp Tyr Ser Glu
20

<210> 77

<211> 17

<212> PRT

<213> Arabidopsis thaliana

<400> 77

Met Trp Arg Ile Ala Thr Ser Val Asp His Phe Arg Arg Ser His Gly
1 5 10 15
Ser

<210> 78

<211> 24

<212> PRT

<213> Arabidopsis thaliana

<400> 78

Ile Ser Ser Arg Asp Glu Gly Tyr Glu Leu Cys Ile Cys Pro Phe Glu
1 5 10 15
Ile Gln Leu Arg Gln Pro Arg Glu
20

<210> 79

<211> 24

<212> PRT

<213> Arabidopsis thaliana

<400> 79

Ser Ala Ser Val Leu Phe Leu Val Leu Arg Phe Ile Pro Arg Arg Thr
1 5 10 15
Phe Tyr Arg Asp Arg Ala Ala Cys
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<210> 80

<211> 14

<212> PRT

<213> Arabidopsis thaliana

<400> 80

Val Leu Gly Arg Arg Arg Val Ser His Gln Leu Pro Trp Arg
1 5 10

<210> 81

<211> 22

<212> PRT

<213> Arabidopsis thaliana

<400> 81

His His Leu Gln Gly Ile Phe Ser His Trp Gly Ser Glu Ser Gly Met
1 5 10 15
Phe Val Gly Asn Arg Arg
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<210> 82

<211> 7

<212> PRT

<213> Arabidopsis thaliana

<400> 82

Glu Asn Thr Gly Glu Asp Ala
1 5

<210> 83

<211> 43

<212> PRT

<213> Arabidopsis thaliana

<400> 83

Lys Thr His Met Pro Glu Thr Asp Asn Thr Asp Ala Pro Thr Glu Gly
1 5 10 15
Leu Phe Glu Glu Asp Ser Asn Arg Val Phe His Ala Tyr Ala Cys Ser
20 25 30
Gln Ser Leu Gly Leu Val Val His Lys Tyr His
35 40

<210> 84

<211> 11

<212> PRT

<213> Arabidopsis thaliana

<400> 84

Cys Gly Gln Lys Leu Cys Ile Val Asp Gly Ile
1 5 10

<210> 85

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<400> 85

Gly Ala Asp Pro Ser
1 5

<210> 86

<211> 14

<212> PRT

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<400> 86

Ser Arg Lys Leu Ala Thr Ser Val Gly Asp Leu Ile Val Arg
1 5 10

<210> 87

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<212> PRT

<213> Arabidopsis thaliana

<400> 87

Gln Asn Pro Asp Leu Ala
1 5

<210> 88

<211> 31

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<213> Arabidopsis thaliana

<400> 88

Asp Ser Val Val Tyr Gln Val Phe Gly Gly Val Val Ser Ser Val Tyr
1 5 10 15
Val Arg Asn Lys Asp Lys Cys Ile Ala Thr Gly Ala Trp Glu Ser
20 25 30

<210> 89

<211> 47

<212> PRT

<213> Arabidopsis thaliana

<400> 89

Lys Thr Glu Ala Ser Gly Pro Thr Lys Asn Ser Val Ser Ser Asp Asp
1 5 10 15
Pro Thr Arg Cys His Met Leu Ala Glu Gln Ala Arg Gly Ser Glu Leu
20 25 30
Val Leu Gln Leu Arg Arg Leu Gly Thr Ala Glu Leu Trp Arg Arg
35 40 45

<210> 90

<211> 7

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<213> Arabidopsis thaliana

<400> 90

Ser Arg Arg Thr Arg Ile Arg
1 5

<210> 91
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<213> Arabidopsis thaliana

<400> 91
Leu Gly Ile Leu Gly Lys Pro Asn His Thr Arg Tyr His Cys Ser Leu
1 5 10 15
Ile Gly Asp Pro Lys Asn Ser Leu Arg Val Arg Cys Phe Ala
20 25 30

<210> 92
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<400> 92
Thr Tyr Thr Ala Ser Pro Arg
1 5

<210> 93
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<400> 93
Thr Pro Leu Leu Gln Ser Pro Ile Thr His
1 5 10

<210> 94
<211> 8
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<213> Arabidopsis thaliana

<400> 94
Pro Trp Gln Glu Pro Glu Lys Thr
1 5

<210> 95
<211> 10
<212> PRT
<213> Arabidopsis thaliana

<400> 95
Leu Gly Val Pro Gly His Thr Arg Arg Phe
1 5 10

<210> 96
<211> 58
<212> PRT
<213> Arabidopsis thaliana

<400> 96

Leu Ala Ser Glu Ser Arg Gly Ser Asp Val Thr Gln Pro Ser Gln Leu
1 5 10 15
Asn Gln Ser Val Gly Lys Phe Cys Lys Pro Arg Leu Ser Ala Glu Tyr
20 25 30
Pro Leu His Lys His Phe Thr Leu Gln Gln Ala Glu Glu Cys Leu Met
35 40 45
Gly Ser Glu Thr Pro Lys Ala Arg Gly Asp
50 55

<210> 97
<211> 33
<212> PRT
<213> Arabidopsis thaliana

<400> 97
Thr Val Arg Leu Gln Arg Asp Arg Gly Ile Asp Lys Arg Thr Arg Glu
1 5 10 15
Ser Ile Arg Arg Arg Ser Asn Ile Val Pro Lys Pro Glu Asp Leu Glu
20 25 30
Asn

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<211> 18
<212> PRT
<213> Arabidopsis thaliana

<400> 98
Gly Ser Ala Arg Thr Lys Gln His Pro Pro Ile Ser Ile Phe Ile Pro
1 5 10 15
Lys Ser

<210> 99
<211> 10
<212> PRT
<213> Arabidopsis thaliana

<400> 99
Asn Ile Ser His His Lys Leu Pro Gln Ser
1 5 10

<210> 100
<211> 18
<212> PRT
<213> Arabidopsis thaliana

<400> 100
Glu Thr Ala Val Ser Gly Glu Glu Asp Pro Asp Glu Leu Ala Asn Ser
1 5 10 15
Leu Leu

<210> 101

<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 101
Thr Ser His His
1

<210> 102
<211> 14
<212> PRT
<213> Arabidopsis thaliana

<400> 102
Glu Leu Arg Ala Leu Cys Thr Asn Met Ser Ile His Lys Met
1 5 10

<210> 103
<211> 23
<212> PRT
<213> Arabidopsis thaliana

<400> 103
Gln Glu Ala Arg Lys Val Val Pro Val Lys Ser Ser Thr Phe His Ile
1 5 10 15
Ala Thr Lys Leu Glu Ile Met
20

<210> 104
<211> 6
<212> PRT
<213> Arabidopsis thaliana

<400> 104
Lys Pro Asn Tyr Pro Arg
1 5

<210> 105
<211> 1491
<212> DNA
<213> Arabidopsis thaliana

<400> 105
atcgattgat ctctggctca gtgcgagtag tccatttgag agcagtcgta gccccgcgtg 60
gcgcatcatg gagctatttg gaattttcgc agggttatcg attcgtatgt ggaacccatt 120
cattgtttgg aaccaccaac ggacgactta acaagctccc cgaggtgcatt gatgaaaatt 180
gctccagttg ccataaaatca cagcccgctc agcagggagg tcccgtaaca cgccgcaccc 240
actcaggcaa agcaaaccaa cttcaatct gaagctggcg atttagatgc aagaaaaagt 300
agcgcttcaa gcccggaaac ccgcgcattt ctcgtacta agacagtact cgggagacac 360
aagatagagg ttccggcattt tggagggtgg ttcaaaaaga aatcatctaa gcacgagacg 420
ggcggttcaa gtgccaacgc agatagttcg agcgtggctt ccgattccac cgaaaaacct 480
ttgttccgtc tcacgcacgt tccttacgta tcccaaggta atgagcgaat gggatgttgg 540
tatgcctgcg caagaatggt tggccattct gtcgaagctg ggcctcgcc agggctgccg 600
gagctctatg aggaaaggaa ggcgccagct gggctacaag atttttcaga ttagaaagg 660
tttattcaca atgaaggatt aactcggtt gaccttccag acaatgagag attacacac 720

gaagagttgg	gtgcactgtt	gtataagcac	gggccgat̄ta	tat̄ttgggtg	gaaaactccg	780
aatgacagct	ggcacatgtc	ggtcctcact	ggtgtcgata	aagagacgtc	gtccattact	840
tttcacgatc	cccgacaggg	gccggaccta	gcaatgccgc	tcgattactt	taatcagcga	900
ttggcatggc	aggttccaca	cgcaatgctc	taccgctaag	tagcagggta	tcttcacgtg	960
gcggcatcat	gacaagccca	tat̄gcccgc	agcagctacc	tgaatgccgt	ctgggtttt	1020
ggtccctatt	gtcgatccg	gaagatgacg	tcaaagaatc	t̄ggcaagag	cttcttgct	1080
cgactcctca	gcttccggat	cgatcaggc	gcttgcaga	gcccgttgc	ccatgagcat	1140
ctgccacagc	tgtggtcga	tgggtcctc	agctaaaggg	atttgcga	caaccatgcg	1200
caactgccc	ttgcgatacg	ctcgatcctg	aagccccgt	gtccatggca	gccccaaaga	1260
aaagacatag	ttcgcgcgt	ttaggtgta	gcctgtgccc	gcccgcacc	tggtcccgt	1320
aaacaccctg	cagtcggat	cctgctggaa	agcatcaatc	gccttctgcc	gcttcttggg	1380
cgagtcactg	cccaccaacg	tcacgcaccc	gacgccaacg	ttgaggcagt	gctcccgt	1440
cgtggccacg	gattcctgtat	actcgcagaa	gaggatcacc	ttgtcgatcga	c	1491

<210> 106

<211> 255

<212> PRT

<213> *Arabidopsis thaliana*

<400> 106

Met	Lys	Ile	Ala	Pro	Val	Ala	Ile	Asn	His	Ser	Pro	Leu	Ser	Arg	Glu
1								10						15	
Val	Pro	Ser	His	Ala	Ala	Pro	Thr	Gln	Ala	Lys	Gln	Thr	Asn	Leu	Gln
								20					25		30
Ser	Glu	Ala	Gly	Asp	Leu	Asp	Ala	Arg	Lys	Ser	Ser	Ala	Ser	Ser	Pro
								35					40		45
Glu	Thr	Arg	Ala	Leu	Leu	Ala	Thr	Lys	Thr	Val	Leu	Gly	Arg	His	Lys
								50					55		60
Ile	Glu	Val	Pro	Ala	Phe	Gly	Gly	Trp	Phe	Lys	Lys	Ser	Ser	Lys	
								65					70		80
His	Glu	Thr	Gly	Gly	Ser	Ser	Ala	Asn	Ala	Asp	Ser	Ser	Ser	Val	Ala
								85					90		95
Ser	Asp	Ser	Thr	Glu	Lys	Pro	Leu	Phe	Arg	Leu	Thr	His	Val	Pro	Tyr
								100					105		110
Val	Ser	Gln	Gly	Asn	Glu	Arg	Met	Gly	Cys	Trp	Tyr	Ala	Cys	Ala	Arg
								115					120		125
Met	Val	Gly	His	Ser	Val	Glu	Ala	Gly	Pro	Arg	Leu	Gly	Leu	Pro	Glu
								130					135		140
Leu	Tyr	Glu	Gly	Arg	Glu	Ala	Pro	Ala	Gly	Leu	Gln	Asp	Phe	Ser	Asp
								145					150		160
Val	Glu	Arg	Phe	Ile	His	Asn	Glu	Gly	Leu	Thr	Arg	Val	Asp	Leu	Pro
								165					170		175
Asp	Asn	Glu	Arg	Phe	Thr	His	Glu	Glu	Leu	Gly	Ala	Leu	Leu	Tyr	Lys
								180					185		190
His	Gly	Pro	Ile	Ile	Phe	Gly	Trp	Lys	Thr	Pro	Asn	Asp	Ser	Trp	His
								195					200		205
Met	Ser	Val	Leu	Thr	Gly	Val	Asp	Lys	Glu	Thr	Ser	Ser	Ile	Thr	Phe
								210					215		220
His	Asp	Pro	Arg	Gln	Gly	Pro	Asp	Leu	Ala	Met	Pro	Leu	Asp	Tyr	Phe
								225					230		235
Asn	Gln	Arg	Leu	Ala	Trp	Gln	Val	Pro	His	Ala	Met	Leu	Tyr	Arg	
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<210> 107

<211> 1258

<212> PRT

<213> *Arabidopsis thaliana*

<400> 107

Met Ser Tyr Leu Arg Glu Val Ala Thr Ala Val Ala Leu Leu Leu Pro
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Phe Ile Leu Leu Asn Lys Phe Asn Arg Pro Asn Ser Lys Asp Ser Ile
20 25 30
Val Asn Asp Asp Asp Asp Ser Thr Ser Glu Val Asp Ala Ile Ser Asp
35 40 45
Ser Thr Asn Pro Ser Gly Ser Phe Pro Ser Val Glu Tyr Glu Val Phe
50 55 60
Leu Ser Phe Arg Gly Pro Asp Thr Arg Glu Gln Phe Thr Asp Phe Leu
65 70 75 80
Tyr Gln Ser Leu Arg Arg Tyr Lys Ile His Thr Phe Arg Asp Asp Asp
85 90 95
Glu Leu Leu Lys Gly Lys Glu Ile Gly Pro Asn Leu Leu Arg Ala Ile
100 105 110
Asp Gln Ser Lys Ile Tyr Val Pro Ile Ile Ser Ser Gly Tyr Ala Asp
115 120 125
Ser Lys Trp Cys Leu Met Glu Leu Ala Glu Ile Val Arg Arg Gln Glu
130 135 140
Glu Asp Pro Arg Arg Ile Ile Leu Pro Ile Phe Tyr Met Val Asp Pro
145 150 155 160
Ser Asp Val Arg His Gln Thr Gly Cys Tyr Lys Lys Ala Phe Arg Lys
165 170 175
His Ala Asn Lys Phe Asp Gly Gln Thr Ile Gln Asn Trp Lys Asp Ala
180 185 190
Leu Lys Lys Val Gly Asp Leu Lys Gly Trp His Ile Gly Lys Asn Asp
195 200 205
Lys Gln Gly Ala Ile Ala Asp Lys Val Ser Ala Asp Ile Trp Ser His
210 215 220
Ile Ser Lys Glu Asn Leu Ile Leu Glu Thr Asp Glu Leu Val Gly Ile
225 230 235 240
Asp Asp His Ile Thr Ala Val Leu Glu Lys Leu Ser Leu Asp Ser Glu
245 250 255
Asn Val Thr Met Val Gly Leu Tyr Gly Met Gly Gly Ile Gly Lys Thr
260 265 270
Thr Thr Ala Lys Ala Val Tyr Asn Lys Ile Ser Ser Cys Phe Asp Cys
275 280 285
Cys Cys Phe Ile Asp Asn Ile Arg Glu Thr Gln Glu Lys Asp Gly Val
290 295 300
Val Val Leu Gln Lys Lys Leu Val Ser Glu Ile Leu Arg Ile Asp Ser
305 310 315 320
Gly Ser Val Gly Phe Asn Asn Asp Ser Gly Gly Arg Lys Thr Ile Lys
325 330 335
Glu Arg Val Ser Arg Phe Lys Ile Leu Val Val Leu Asp Asp Val Asp
340 345 350
Glu Lys Phe Lys Phe Glu Asp Met Leu Gly Ser Pro Lys Asp Phe Ile
355 360 365
Ser Gln Ser Arg Phe Ile Ile Thr Ser Arg Ser Met Arg Val Leu Gly
370 375 380
Thr Leu Asn Glu Asn Gln Cys Lys Leu Tyr Glu Val Gly Ser Met Ser
385 390 395 400
Lys Pro Arg Ser Leu Glu Leu Phe Ser Lys His Ala Phe Lys Lys Asn
405 410 415
Thr Pro Pro Ser Ser Tyr Tyr Glu Thr Leu Ala Asn Asp Val Val Asp
420 425 430
Thr Thr Ala Gly Leu Pro Leu Thr Leu Lys Val Ile Gly Ser Leu Leu
435 440 445
Phe Lys Gln Glu Ile Ala Val Trp Glu Asp Thr Leu Glu Gln Leu Arg
450 455 460

Arg Thr Leu Asn Leu Asp Glu Val Tyr Asp Arg Leu Lys Ile Ser Tyr
 465 470 475 480
 Asp Ala Leu Asn Pro Glu Ala Lys Glu Ile Phe Leu Asp Ile Ala Cys
 485 490 495
 Phe Phe Ile Gly Gln Asn Lys Glu Glu Pro Tyr Tyr Met Trp Thr Asp
 500 505 510
 Cys Asn Phe Tyr Pro Ala Ser Asn Ile Ile Phe Leu Ile Gln Arg Cys
 515 520 525
 Met Ile Gln Val Gly Asp Asp Glu Phe Lys Met His Asp Gln Leu
 530 535 540
 Arg Asp Met Gly Arg Glu Ile Val Arg Arg Glu Asp Val Leu Pro Trp
 545 550 555 560
 Lys Ser Arg Ile Trp Ser Ala Glu Glu Gly Ile Asp Leu Leu Leu Asn
 565 570 575
 Lys Arg Lys Gly Ser Ser Lys Val Lys Ala Ile Ser Ile Pro Trp Gly
 580 585 590
 Val Lys Tyr Glu Phe Lys Ser Glu Cys Phe Leu Asn Leu Ser Glu Leu
 595 600 605
 Arg Tyr Leu His Ala Arg Glu Ala Met Leu Thr Gly Asp Phe Asn Asn
 610 615 620
 Leu Leu Pro Asn Leu Lys Trp Leu Glu Leu Pro Phe Tyr Lys His Gly
 625 630 635 640
 Glu Asp Asp Pro Pro Leu Thr Asn Tyr Thr Met Lys Asn Leu Ile Ile
 645 650 655
 Val Ile Leu Glu His Ser His Ile Thr Ala Asp Asp Trp Gly Gly Trp
 660 665 670
 Arg His Met Met Lys Met Ala Glu Arg Leu Lys Val Val Arg Leu Ala
 675 680 685
 Ser Asn Tyr Ser Leu Tyr Gly Arg Arg Val Arg Leu Ser Asp Cys Trp
 690 695 700
 Arg Phe Pro Lys Ser Ile Glu Val Leu Ser Met Thr Ala Ile Glu Met
 705 710 715 720
 Asp Glu Val Asp Ile Gly Glu Leu Lys Leu Lys Thr Leu Val Leu
 725 730 735
 Lys Pro Cys Pro Ile Gln Lys Ile Ser Gly Gly Thr Phe Gly Met Leu
 740 745 750
 Lys Gly Leu Arg Glu Leu Cys Leu Glu Phe Asn Trp Gly Thr Asn Leu
 755 760 765
 Arg Glu Val Val Ala Asp Ile Gly Gln Leu Ser Ser Leu Lys Val Leu
 770 775 780
 Lys Thr Gly Ala Lys Glu Val Glu Ile Asn Glu Phe Pro Leu Gly Leu
 785 790 795 800
 Lys Thr Glu Leu Ser Thr Ser Ser Arg Ile Pro Asn Asn Leu Ser Gln
 805 810 815
 Leu Leu Asp Leu Glu Val Leu Lys Val Tyr Asp Cys Lys Asp Gly Phe
 820 825 830
 Asp Met Pro Pro Ala Ser Pro Ser Glu Asp Glu Ser Ser Val Trp Trp
 835 840 845
 Lys Val Ser Lys Leu Lys Ser Leu Gln Leu Glu Lys Thr Arg Ile Asn
 850 855 860
 Val Asn Val Val Asp Asp Ala Ser Ser Gly Gly His Leu Pro Arg Tyr
 865 870 875 880
 Leu Leu Pro Thr Ser Leu Thr Tyr Leu Lys Ile Tyr Gln Cys Thr Glu
 885 890 895
 Pro Thr Trp Leu Pro Gly Ile Glu Asn Leu Glu Asn Leu Thr Ser Leu
 900 905 910
 Glu Val Asn Asp Ile Phe Gln Thr Leu Gly Gly Asp Leu Asp Gly Leu
 915 920 925
 Gln Gly Leu Arg Ser Leu Glu Ile Leu Arg Ile Arg Lys Val Asn Gly

930	935	940	
Leu Ala Arg Ile Lys Gly	Leu Lys Asp Leu	Leu Cys Ser Ser Thr Cys	
945	950	955	960
Lys Leu Arg Lys Phe Tyr	Ile Thr Glu Cys Pro Asp	Leu Ile Glu Leu	
965	970	975	
Leu Pro Cys Glu	Leu Gly Val Gln Thr Val Val Val	Pro Ser Met Ala	
980	985	990	
Glu Leu Thr Ile Arg Asp Cys	Pro Arg Leu Glu Val Gly	Pro Met Ile	
995	1000	1005	
Arg Ser Leu Pro Lys Phe	Pro Met Leu Lys Lys	Leu Asp Leu Ala Val	
1010	1015	1020	
Ala Asn Ile Thr Lys	Glu Glu Asp Leu Asp Ala Ile Gly Ser	Leu Glu	
1025	1030	1035	1040
Glu Leu Val Ser Leu Glu	Leu Glu Leu Asp Asp Thr Ser Ser	Gly Ile	
1045	1050	1055	
Glu Arg Ile Val Ser Ser Ser	Lys Leu Gln Lys Leu Thr Thr	Leu Val	
1060	1065	1070	
Val Lys Val Pro Ser Leu Arg	Glu Ile Glu Gly Leu Glu Glu Leu	Lys	
1075	1080	1085	
Ser Leu Gln Asp Leu Tyr	Leu Glu Gly Cys Thr Ser	Leu Gly Arg Leu	
1090	1095	1100	
Pro Leu Glu Lys Leu Lys	Glu Leu Asp Ile Gly Gly Cys Pro Asp	Leu	
1105	1110	1115	1120
Thr Glu Leu Val Gln	Thr Val Val Ala Val Pro Ser	Leu Arg Gly Leu	
1125	1130	1135	
Thr Ile Arg Asp Cys Pro Arg	Leu Glu Val Gly Pro Met Ile Gln Ser		
1140	1145	1150	
Leu Pro Lys Phe Pro Met Leu	Asn Glu Leu Thr Leu Ser Met Val Asn		
1155	1160	1165	
Ile Thr Lys Glu Asp Glu	Leu Glu Val Leu Gly Ser Leu Glu Glu Leu		
1170	1175	1180	
Asp Ser Leu Glu Leu Thr	Leu Asp Asp Thr Cys Ser Ser Ile Glu Arg		
1185	1190	1195	1200
Ile Ser Phe Leu Ser Lys	Leu Gln Lys Leu Thr Thr Leu Ile Val Glu		
1205	1210	1215	
Val Pro Ser Leu Arg Glu	Ile Glu Gly Leu Ala Glu Leu Lys Ser Leu		
1220	1225	1230	
Arg Ile Leu Tyr Leu Glu	Gly Cys Thr Ser Leu Glu Arg Leu Trp Pro		
1235	1240	1245	
Asp Gln Gln Leu Gly Ser	Leu Lys Asn		
1250	1255		

<210> 108

<211> 1143

<212> PRT

<213> Arabidopsis thaliana

<400> 108

Met Ala Ser Ser Ser Ser	Arg Trp Ser Tyr Asp Val Phe Leu		
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Ser Phe Arg Gly Glu Asp	Thr Arg Lys Thr Phe Thr Ser His	Leu Tyr	
20	25	30	
Glu Val Leu Asn Asp Lys	Gly Ile Lys Thr Phe Gln Asp Asp Lys Arg		
35	40	45	
Leu Glu Tyr Gly Ala Thr	Ile Pro Gly Glu Leu Cys Lys Ala Ile Glu		
50	55	60	
Glu Ser Gln Phe Ala Ile	Val Val Phe Ser Glu Asn Tyr Ala Thr Ser		
65	70	75	80

Arg Trp Cys Leu Asn Glu Leu Val Lys Ile Met Glu Cys Lys Thr Arg
 85 90 95
 Phe Lys Gln Thr Val Ile Pro Ile Phe Tyr Asp Val Asp Pro Ser His
 100 105 110
 Val Arg Asn Gln Lys Glu Ser Phe Ala Lys Ala Phe Glu Glu His Glu
 115 120 125
 Thr Lys Tyr Lys Asp Asp Val Glu Gly Ile Gln Arg Trp Arg Ile Ala
 130 135 140
 Leu Asn Glu Ala Ala Asn Leu Lys Gly Ser Cys Asp Asn Arg Asp Lys
 145 150 155 160
 Thr Asp Ala Asp Cys Ile Arg Gln Ile Val Asp Gln Ile Ser Ser Lys
 165 170 175
 Leu Cys Lys Ile Ser Leu Ser Tyr Leu Gln Asn Ile Val Gly Ile Asp
 180 185 190
 Thr His Leu Glu Lys Ile Glu Ser Leu Leu Glu Ile Gly Ile Asn Gly
 195 200 205
 Val Arg Ile Met Gly Ile Trp Gly Met Gly Gly Val Gly Lys Thr Thr
 210 215 220
 Ile Ala Arg Ala Ile Phe Asp Thr Leu Leu Gly Arg Met Asp Ser Ser
 225 230 235 240
 Tyr Gln Phe Asp Gly Ala Cys Phe Leu Lys Asp Ile Lys Glu Asn Lys
 245 250 255
 Arg Gly Met His Ser Leu Gln Asn Ala Leu Leu Ser Glu Leu Leu Arg
 260 265 270
 Glu Lys Ala Asn Tyr Asn Asn Glu Glu Asp Gly Lys His Gln Met Ala
 275 280 285
 Ser Arg Leu Arg Ser Lys Lys Val Leu Ile Val Leu Asp Asp Ile Asp
 290 295 300
 Asn Lys Asp His Tyr Leu Glu Tyr Leu Ala Gly Asp Leu Asp Trp Phe
 305 310 315 320
 Gly Asn Gly Ser Arg Ile Ile Ile Thr Thr Arg Asp Lys His Leu Ile
 325 330 335
 Glu Lys Asn Asp Ile Ile Tyr Glu Val Thr Ala Leu Pro Asp His Glu
 340 345 350
 Ser Ile Gln Leu Phe Lys Gln His Ala Phe Gly Lys Glu Val Pro Asn
 355 360 365
 Glu Asn Phe Glu Lys Leu Ser Leu Glu Val Val Asn Tyr Ala Lys Gly
 370 375 380
 Leu Pro Leu Ala Leu Lys Val Trp Gly Ser Leu Leu His Asn Leu Arg
 385 390 395 400
 Leu Thr Glu Trp Lys Ser Ala Ile Glu His Met Lys Asn Asn Ser Tyr
 405 410 415
 Ser Gly Ile Ile Asp Lys Leu Lys Ile Ser Tyr Asp Gly Leu Glu Pro
 420 425 430
 Lys Gln Gln Glu Met Phe Leu Asp Ile Ala Cys Phe Leu Arg Gly Glu
 435 440 445
 Glu Lys Asp Tyr Ile Leu Gln Ile Leu Glu Ser Cys His Ile Gly Ala
 450 455 460
 Glu Tyr Gly Leu Arg Ile Leu Ile Asp Lys Ser Leu Val Phe Ile Ser
 465 470 475 480
 Glu Tyr Asn Gln Val Gln Met His Asp Leu Ile Gln Asp Met Gly Lys
 485 490 495
 Tyr Ile Val Asn Phe Gln Lys Asp Pro Gly Glu Arg Ser Arg Leu Trp
 500 505 510
 Leu Ala Lys Glu Val Glu Val Met Ser Asn Asn Thr Gly Thr Met
 515 520 525
 Ala Met Glu Ala Ile Trp Val Ser Ser Tyr Ser Ser Thr Leu Arg Phe
 530 535 540
 Ser Asn Gln Ala Val Lys Asn Met Lys Arg Leu Arg Val Phe Asn Met

545	550	555	560
Gly Arg Ser Ser Thr His Tyr Ala Ile Asp	Tyr Leu Pro Asn Asn Leu		
565	570	575	
Arg Cys Phe Val Cys Thr Asn Tyr Pro Trp Glu Ser Phe Pro Ser Thr			
580	585	590	
Phe Glu Leu Lys Met Leu Val His Leu Gln Leu Arg His Asn Ser Leu			
595	600	605	
Arg His Leu Trp Thr Glu Thr Lys His Leu Pro Ser Leu Arg Arg Ile			
610	615	620	
Asp Leu Ser Trp Ser Lys Arg Leu Thr Arg Thr Pro Asp Phe Thr Gly			
625	630	635	640
Met Pro Asn Leu Glu Tyr Val Asn Leu Tyr Gln Cys Ser Asn Leu Glu			
645	650	655	
Glu Val His His Ser Leu Gly Cys Cys Ser Lys Val Ile Gly Leu Tyr			
660	665	670	
Leu Asn Asp Cys Lys Ser Leu Lys Arg Phe Pro Cys Val Asn Val Glu			
675	680	685	
Ser Leu Glu Tyr Leu Gly Leu Arg Ser Cys Asp Ser Leu Glu Lys Leu			
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Pro Glu Ile Tyr Gly Arg Met Lys Pro Glu Ile Gln Ile His Met Gln			
705	710	715	720
Gly Ser Gly Ile Arg Glu Leu Pro Ser Ser Ile Phe Gln Tyr Lys Thr			
725	730	735	
His Val Thr Lys Leu Leu Leu Trp Asn Met Lys Asn Leu Val Ala Leu			
740	745	750	
Pro Ser Ser Ile Cys Arg Leu Lys Ser Leu Val Ser Leu Ser Val Ser			
755	760	765	
Gly Cys Ser Lys Leu Glu Ser Leu Pro Glu Glu Ile Gly Asp Leu Asp			
770	775	780	
Asn Leu Arg Val Phe Asp Ala Ser Asp Thr Leu Ile Leu Arg Pro Pro			
785	790	795	800
Ser Ser Ile Ile Arg Leu Asn Lys Leu Ile Ile Leu Met Phe Arg Gly			
805	810	815	
Phe Lys Asp Gly Val His Phe Glu Phe Pro Pro Val Ala Glu Gly Leu			
820	825	830	
His Ser Leu Glu Tyr Leu Asn Leu Ser Tyr Cys Asn Leu Ile Asp Gly			
835	840	845	
Gly Leu Pro Glu Glu Ile Gly Ser Leu Ser Ser Leu Lys Lys Leu Asp			
850	855	860	
Leu Ser Arg Asn Asn Phe Glu His Leu Pro Ser Ser Ile Ala Gln Leu			
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Gly Ala Leu Gln Ser Leu Asp Leu Lys Asp Cys Gln Arg Leu Thr Gln			
885	890	895	
Leu Pro Glu Leu Pro Pro Glu Leu Asn Glu Leu His Val Asp Cys His			
900	905	910	
Met Ala Leu Lys Phe Ile His Tyr Leu Val Thr Lys Arg Lys Lys Leu			
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His Arg Val Lys Leu Asp Asp Ala His Asn Asp Thr Met Tyr Asn Leu			
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Phe Ala Tyr Thr Met Phe Gln Asn Ile Ser Ser Met Arg His Asp Ile			
945	950	955	960
Ser Ala Ser Asp Ser Leu Ser Leu Thr Val Phe Thr Gly Gln Pro Tyr			
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Pro Glu Lys Ile Pro Ser Trp Phe His His Gln Gly Trp Asp Ser Ser			
980	985	990	
Val Ser Val Asn Leu Pro Glu Asn Trp Tyr Ile Pro Asp Lys Phe Leu			
995	1000	1005	
Gly Phe Ala Val Cys Tyr Ser Arg Ser Leu Ile Asp Thr Thr Ala His			
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 Val Ser Val Met Ala Tyr Lys Ala Glu Tyr Val Ile Asp Ser Cys Leu
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 Ala Tyr Ser His Pro Leu Trp Tyr Lys Val Leu Trp Ile Ser Glu Val
 65 70 75 80
 Leu Glu Asn Ile Lys Leu Val Asn Lys Val Val Gly Glu Thr Cys Glu
 85 90 95
 Arg Arg Asn Thr Glu Val Thr Val His Glu Val Ala Lys Thr Thr Thr
 100 105 110
 Asn Val Ala Pro Ser Phe Ser Ala Tyr Thr Gln Arg Ala Asn Glu Glu
 115 120 125
 Met Glu Gly Phe Gln Asp Thr Ile Asp Glu Leu Lys Asp Lys Leu Leu
 130 135 140
 Gly Gly Ser Pro Glu Leu Asp Val Ile Ser Ile Val Gly Met Pro Gly
 145 150 155 160
 Leu Gly Lys Thr Thr Leu Ala Lys Lys Ile Tyr Asn Asp Pro Glu Val
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 Thr Ser Arg Phe Asp Val His Ala Gln Cys Val Val Thr Gln Leu Tyr
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 Ser Trp Arg Glu Leu Leu Leu Thr Ile Leu Asn Asp Val Leu Glu Pro
 195 200 205
 Ser Asp Arg Asn Glu Lys Glu Asp Gly Glu Ile Ala Asp Glu Leu Arg
 210 215 220
 Arg Phe Leu Leu Thr Lys Arg Phe Leu Ile Leu Ile Asp Asp Val Trp
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 Asp Tyr Lys Val Trp Asp Asn Leu Cys Met Cys Phe Ser Asp Val Ser
 245 250 255
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 260 265 270
 Tyr Val Lys Cys Glu Ser Asp Pro His His Leu Arg Leu Phe Arg Asp

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Cys Pro Pro Glu Leu Glu Asp Val Gly Phe Glu Ile	Ser Lys Ser Cys		
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Arg Gly Leu Pro Leu Ser Val Val Leu Val Ala	Gly Val Leu Lys Gln		
325	330	335	
Lys Lys Lys Thr Leu Asp Ser Trp Lys Val Val Glu	Gln Ser Leu Ser		
340	345	350	
Ser Gln Arg Ile Gly Ser Leu Glu Glu Ser Ile Ile	Gly Phe		
355	360	365	
Ser Tyr Lys Asn Leu Pro His Tyr Leu Lys Pro Cys	Phe Leu Tyr Phe		
370	375	380	
Gly Gly Phe Leu Gln Gly Lys Asp Ile His Asp Ser	Lys Met Thr Lys		
385	390	395	400
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<213> *Arabidopsis thaliana*

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Gln	Ala	Ile	Thr	Asp	Leu	Glu	Thr	Ala	Ile	Gly	Asp	Leu	Lys	Ala	Ile
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Glu	Thr	Lys	Thr	Ala	Leu	Leu	Leu	Val	Arg	Phe	Arg	Arg	Arg	Glu	Gln
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 Ile Ile Gly Val Tyr Gly Pro Gly Gly Val Gly Lys Thr Thr Leu Met
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 Gln Ser Ile Asn Asn Glu Leu Ile Thr Lys Gly His Gln Tyr Asp Val
 195 200 205
 Leu Ile Trp Val Gln Met Ser Arg Glu Phe Gly Glu Cys Thr Ile Gln
 210 215 220
 Gln Ala Val Gly Ala Arg Leu Gly Leu Ser Trp Asp Glu Lys Glu Thr
 225 230 235 240
 Gly Glu Asn Arg Ala Leu Lys Ile Tyr Arg Ala Leu Arg Gln Lys Arg
 245 250 255
 Phe Leu Leu Leu Leu Asp Asp Val Trp Glu Glu Ile Asp Leu Glu Lys
 260 265 270
 Thr Gly Val Pro Arg Pro Asp Arg Glu Asn Lys Cys Lys Val Met Phe
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 Thr Thr Arg Ser Ile Ala Leu Cys Asn Asn Met Gly Ala Glu Tyr Lys
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 Leu Arg Val Glu Phe Leu Glu Lys Lys His Ala Trp Glu Leu Phe Cys
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 Ser Lys Val Trp Arg Lys Asp Leu Leu Glu Ser Ser Ile Arg Arg
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 Pro Ser Met Gly His Thr Glu Ala Pro Lys Ala Glu Asn Trp Arg Gln
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 Arg Val Leu Asp Leu Ser Phe Thr Ser Ile Thr Glu Ile Pro Leu Ser
 565 570 575
 Ile Lys Tyr Leu Val Glu Leu Tyr His Leu Ser Met Ser Gly Thr Lys
 580 585 590
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 610 615 620
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Gly	Phe	Ala	Asp
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Glu	Asn	Leu	Thr
Leu	Thr	Leu	Gly
Thr	Val	Leu	Ile
Leu	Ser	Glu	Asn
Leu	Leu	Thr	Leu
Gly	Phe	Leu	Phe
Ala	Gly	Gly	Ala
Leu	His	His	Ile
Leu	Lys	His	Gln
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Leu	Val	Glu	Glu
Glu	Cys	Asn	Glu
Leu	Asn	Glu	Leu
Leu	Tyr	Phe	Arg
Leu	Asn	Leu	Asn
Leu	Pro	Ser	His
Leu	Thr	Asn	Gly
Asn	Gly	Arg	Arg
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Leu	Arg	Ile	Ile
Asp	Cys	Arg	Arg
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Asn	His	Cys	Asn
Ile	Asn	Asn	Lys
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Leu	Asn	Ser	Trp
Leu	Leu	Thr	Gly
Gly	Asn	Arg	Asn
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Leu	Thr	Leu	Leu
Asn	Asp	Asp	Asp
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Cys	Tyr	Tyr	Tyr
Tyr	Leu	Leu	Leu
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<213> Arabidopsis thaliana

<400> 143

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<400> 149
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1 5 10 15

Val Leu Ser Leu Glu Thr Leu Lys Thr
20 25

<210> 150
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<213> Arabidopsis thaliana

<400> 150
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1 5 10 15
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20 25

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<400> 151
Pro Ser Leu Thr Asn His Gly Arg Asn Leu Arg Arg Leu Ser Ile Lys
1 5 10 15
Ser Cys His Asp Leu Glu Tyr Leu Val Thr
20 25

<210> 152
<211> 29
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<213> Arabidopsis thaliana

<400> 152
Pro Ala Asp Phe Glu Asn Asp Trp Leu Pro Ser Leu Glu Val Leu Thr
1 5 10 15
Leu His Ser Leu His Asn Leu Thr Arg Val Trp Gly Asn
20 25

<210> 153
<211> 30
<212> PRT
<213> Arabidopsis thaliana

<400> 153
Ser Val Ser Gln Asp Cys Leu Arg Asn Ile Arg Cys Ile Asn Ile Ser
1 5 10 15
His Cys Asn Lys Leu Lys Asn Val Ser Trp Val Gln Lys Leu
20 25 30

<210> 154
<211> 28
<212> PRT
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<400> 154
Pro Lys Leu Glu Val Ile Glu Leu Phe Asp Cys Arg Glu Ile Glu Glu

1	5	10	15
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20		25	

<210> 155
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<400> 155			
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1	5	10	15
Glu Leu Asn Ser Ile Leu			
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<210> 156
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<400> 156			
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1	5	10	15
Cys Pro Arg Val Lys Lys Leu			
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<210> 157
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<400> 157			
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	1440		

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<210> 158	
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<222> (1) ... (20)	
<223> n = A, T, C or G	
<400> 159	
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<211> 17	
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<222> (1) ... (33)	
<223> n = A, T, C or G	
<400> 161	
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<210> 162	

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<400> 162	
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<400> 163	
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<210> 164	
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<223> n = A, T, C or G	
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<210> 165	
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<222> (1) ... (26)	
<223> n = A, T, C or G	
<400> 165	
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<210> 166	
<211> 26	
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<223> n = A, T, C or G	
<400> 166	
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<210> 167
<211> 21
<212> DNA
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<220>
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<222> (1)...(21)
<223> n = A, T, C or G

<400> 167
ncgngwngtn akdawncgng a 21

<210> 168
<211> 21
<212> DNA
<213> *Arabidopsis thaliana*

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<223> n = A, T, C or G

<400> 168
ncknswngtn addatdaatn g 21

<210> 169
<211> 12
<212> DNA
<213> *Arabidopsis thaliana*

<220>
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<223> n = A, T, C or G

<400> 169
narnggnarn cc 12

<210> 170
<211> 17
<212> DNA
<213> *Arabidopsis thaliana*

<400> 170
ggwytbccwy tbgchyt 17

<210> 171
<211> 17
<212> DNA
<213> *Arabidopsis thaliana*

<220>
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<400> 171
ardgcvarwg gvarncc 17

<210> 172	
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<400> 173	
ggnytnccny tndsnbt	17
<210> 174	
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arrtrrtcrt adswrawytt	20
<210> 175	
<211> 20	
<212> DNA	
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<222> (1) ... (20)	
<223> n = A, T, C or G	
<400> 175	
arnyyntyrt ansrnannyy	20
<210> 176	
<211> 20	
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<222> (1) ... (20)	
<223> n = A, T, C or G	
<400> 176	
rrnwthwsnt ayranrvnyt	20

<210> 177
<211> 20
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<213> Arabidopsis thaliana

<220>
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<222> (1)...(20)
<223> n = A,T,C or G

<400> 177
gtnttgytnw snttymgrgg 20

<210> 178
<211> 23
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(23)
<223> n = A,T,C or G

<400> 178
ccnathttyp ayrwbgtnga ycc 23

<210> 179
<211> 17
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<213> Arabidopsis thaliana

<220>
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<222> (1)...(17)
<223> n = A,T,C or G

<400> 179
gtnggnathg ayrmnca 17

<210> 180
<211> 21
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<213> Arabidopsis thaliana

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<223> n = A,T,C or G

<400> 180
raarcangcd atrtcnarra a 21

<210> 181
<211> 20
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature

<222> (1) ... (20)
<223> n = A, T, C or G

<400> 181
t₁yytngaya thgcntgytt 20

<210> 182
<211> 26
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1) ... (26)
<223> n = A, T, C or G

<400> 182
cccatr₁tcyy knadnwr₁tc rtgcat 26

<210> 183
<211> 26
<212> DNA
<213> Arabidopsis thaliana

<220>
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<222> (1) ... (26)
<223> n = A, T, C or G

<400> 183
atgcayg₁ayy wnhtnmrrga yatggg 26

<210> 184
<211> 15
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1) ... (15)
<223> n = A, T, C or G

<400> 184
narnswytyn arytt 15

<210> 185
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<220>
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<222> (1) ... (17)
<223> n = A, T, C or G

<400> 185
wsnaarytnr arwsnyt 17

<210> 186

<211> 21
<212> DNA
<213> Arabidopsis thaliana

<220>
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<222> (1)...(21)
<223> n = A,T,C or G

<400> 186
dwwytcnarn swnyknarnc c

21

<210> 187
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(17)
<223> n = A,T,C or G

<400> 187
ggnytnmrnw snytnga

17

<210> 188
<211> 13
<212> PRT
<213> Arabidopsis thaliana

<400> 188
Leu Lys Phe Ser Tyr Asp Asn Leu Glu Ser Asp Leu Leu
1 5 10

<210> 189
<211> 16
<212> PRT
<213> Arabidopsis thaliana

<400> 189
Gly Val Tyr Gly Pro Gly Gly Val Gly Lys Thr Thr Leu Met Gln Ser
1 5 10 15

<210> 190
<211> 14
<212> PRT
<213> Arabidopsis thaliana

<400> 190
Gly Gly Leu Pro Leu Ala Leu Ile Thr Leu Gly Gly Ala Met
1 5 10

<210> 191
<211> 11
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (2)...(2)
<223> Xaa is Met or Pro

<221> VARIANT
<222> (3)...(3)
<223> Xaa is Gly or Pro

<221> VARIANT
<222> (5)...(5)
<223> Xaa is Ile, Leu or Val

<221> VARIANT
<222> (10)...(10)
<223> Xaa is Ile, Leu or Thr

<221> VARIANT
<222> (11)...(11)
<223> Xaa is Ala or Met

<400> 191
Gly Xaa Xaa Gly Xaa Gly Lys Thr Thr Xaa Xaa
1 5 10

<210> 192
<211> 11
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(11)
<223> Xaa at 1 is Phe or Lys; Xaa at 2 is Arg or Lys;
Xaa at 3 is Ile, Val or Phe; Xaa at 5 is Ile, Leu
or Val; Xaa at 6 is Ile or Leu; Xaa at 7 is Ile or
Val; Xaa at 10 is Ile, Leu or Val; Xaa at 11 is
Asp or Trp;

<400> 192
Xaa Xaa Xaa Leu Xaa Xaa Xaa Asp Asp Xaa Xaa
1 5 10

<210> 193
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(8)
<223> Xaa at 1 is Ser or Cys; Xaa at 2 is Arg or Lys;
Xaa at 3 is Phe, Ile or Val; Xaa at 4 is Ile or
Met; Xaa at 5 is Ile, Leu or Phe; Xaa at 7 is Ser,
Cys or Thr;

<400> 193

Xaa Xaa Xaa Xaa Xaa Thr Xaa Arg
1 5

<210> 194
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(8)
<223> Xaa at 5 is Thr, Ala or Thr; Xaa at 6 is Leu or
Val; Xaa at 7 is Ile, Val or Lys; Xaa at 8 is Val
or Thr;

<400> 194
Gly Leu Pro Leu Xaa Xaa Xaa Xaa
1 5

<210> 195
<211> 7
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(7)
<223> Xaa at 1 is Lys or Gly; Xaa at 2 is Ile or Phe;
Xaa at 5 is Asp or Lys; Xaa at 6 is Ala, Gly or
Asn;

<400> 195
Xaa Xaa Ser Tyr Xaa Xaa Leu
1 5

<210> 196
<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 196
Asn Ser His Arg
1

<210> 197

<400> 197
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<210> 198
<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 198
Thr Gly Asp Leu
1

<210> 199
<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 199
His Gly Thr Tyr
1

<210> 200
<211> 11
<212> PRT
<213> Arabidopsis thaliana

<400> 200
Arg Met Ser His Gly Phe Arg Asn Ser Gln Ser
1 5 10

<210> 201
<211> 27
<212> PRT
<213> Arabidopsis thaliana

<400> 201
Gly Glu Met Val Glu Ser Thr Gly Lys Arg Ser Thr Lys Arg Arg Ala
1 5 10 15
Leu Leu Phe Thr Ala Leu Cys Ser Lys Leu Ile
20 25

<210> 202
<211> 9
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(9)
<223> Xaa at position 5 is Met or Asp

<400> 202
Pro Ile Phe Tyr Xaa Val Asp Pro Ser
1 5

<210> 203
<211> 6
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT

<222> (1)...(6)

<223> Xaa at position 5 is Asp or Thr

<400> 203

Val Gly Ile Asp Xaa His
1 5

<210> 204

<211> 9

<212> PRT

<213> Arabidopsis thaliana

<220>

<221> VARIANT

<222> (1)...(9)

<223> Xaa at position 1 is Gln or Leu; Xaa at position 2
is Leu or Ile; Xaa at position 3 is Arg or Gln.

<400> 204

Met His Asp Xaa Xaa Xaa Asp Met Gly
1 5

<210> 205

<211> 6

<212> PRT

<213> Arabidopsis thaliana

<400> 205

Ser Lys Leu Lys Ser Leu
1 5

<210> 206

<211> 8

<212> PRT

<213> Arabidopsis thaliana

<220>

<221> VARIANT

<222> (1)...(8)

<223> Xaa at position 3 is Arg or His; Xaa at position 7
is Ile or Tyr.

<400> 206

Gly Leu Xaa Ser Leu Glu Xaa Leu
1 5

<210> 207

<211> 6

<212> PRT

<213> Arabidopsis thaliana

<400> 207

Ser Lys Leu Lys Ser Leu
1 5

<210> 208
<211> 7
<212> PRT
<213> Arabidopsis thaliana

<400> 208
Lys Phe Ser Tyr Asp Asn Leu
1 5

<210> 209
<211> 23
<212> PRT
<213> Arabidopsis Thalia

<220>
<221> VARIANT
<222> 2,3,5,6,8,9,11,12,14,16-9,21,22
<223> Xaa=any amino acid

<221> VARIANT
<222> 4,15,20,23
<223> Xaa=L or I or V

<400> 209
Pro Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20

<210> 210
<211> 23
<212> PRT
<213> Yeast

<220>
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<222> 2,3,5,6,8,9,11,12,14,16,17,19,21,22
<223> Xaa= any amino acid

<221> VARIANT
<222> 4,20,23
<223> Xaa=L or I or V

<400> 210
Pro Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Leu Xaa Leu Xaa
1 5 10 15
Xaa Asn Xaa Xaa Xaa Xaa Xaa
20

<210> 211
<211> 12
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<213> Arabidopsis thaliana

<220>
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<222> 2,3,5,6,8,9,11

<223> Xaa=any amino acid

<221> VARIANT

<222> 1

<223> Xaa=I or L or V

<221> VARIANT

<222> 10

<223> Xaa=I or L

<400> 211

Xaa Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Xaa Xaa Leu

1

5

10

<210> 212

<211> 7

<212> PRT

<213> Arabidopsis thaliana

<220>

<221> VARIANT

<222> 1

<223> Xaa=I or R

<221> VARIANT

<222> 2,5-7

<223> Xaa=any amino acid

<400> 212

Xaa Xaa Asp Leu Xaa Xaa Xaa

1

5

<210> 213

<211> 8

<212> PRT

<213> Arabidopsis thaliana

<400> 213

Gly Pro Gly Gly Val Gly Lys Thr

1

5

<210> 214

<211> 16

<212> PRT

<213> Arabidopsis thaliana

<400> 214

Thr Tyr Gly Ala Tyr Gly Ala Tyr Arg Thr Asx Tyr Arg Asx Arg Ala

1

5

10

15